

For Research Use Only

# SATB1 Polyclonal antibody

Catalog Number: 15400-1-AP

Featured Product

9 Publications



## Basic Information

### Catalog Number:

15400-1-AP

### Concentration:

600 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7615

### GenBank Accession Number:

BC001744

### GeneID (NCBI):

6304

### UNIPROT ID:

Q01826

### Full Name:

SATB homeobox 1

### Calculated MW:

86 kDa

### Observed MW:

86-100 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:1000-1:4000

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IP, CoIP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB** : human brain tissue, HEK-293 cells, mouse brain tissue, mouse spleen tissue, rat brain tissue

**IP** : HEK-293 cells,

**IHC** : human oesophagus cancer tissue, human urothelial carcinoma tissue, mouse spleen tissue, mouse thymus tissue, rat brain tissue, rat spleen tissue, rat thymus tissue

## Background Information

Epigenetic modifications and dynamic changes in chromatin organization by organizer proteins have recently been shown to play an instrumental role in regulating cancer-promoting genes. Special AT-rich binding protein (SATB1) is a unique type of global regulator that integrates higher-order chromatin organization -with regulation of gene expression. [PMID:23076250,22998183,23121661] SATB1 is a T cell-enriched transcription factor and a chromatin organizer essential for controlling genes that participate in T-cell development and activation. It regulates gene expression by periodically anchoring matrix attachment regions to the nuclear matrix and directly recruiting chromatin-modifying factors. Depending on its posttranslational modifications, SATB1 activates or represses multiple genes. Its expression is regulated by interleukin-4 (IL4) during T helper-2(Th2) cell differentiation [PMID: 20522714]. The calculated molecular weight of SATB1 is 86 kDa, but modified SATB1 is about 100 kDa (PMID: 22879953).

## Notable Publications

Author	Pubmed ID	Journal	Application
Sikai Zhan	36274077	Mol Neurobiol	WB
Dongni Zhou	33390772	Int J Med Sci	WB
Jiale Cai	35483515	Pharmacol Res	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

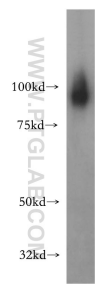
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

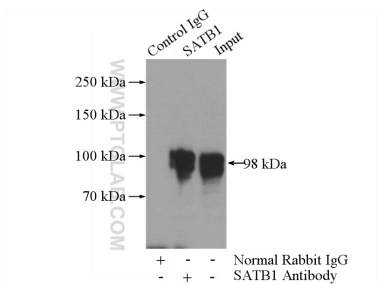
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

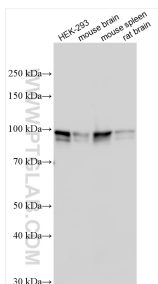
Selected Validation Data



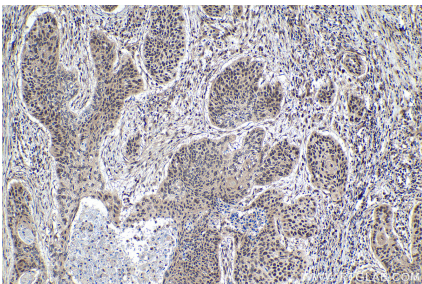
human brain tissue were subjected to SDS PAGE followed by western blot with 15400-1-AP (SATB1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



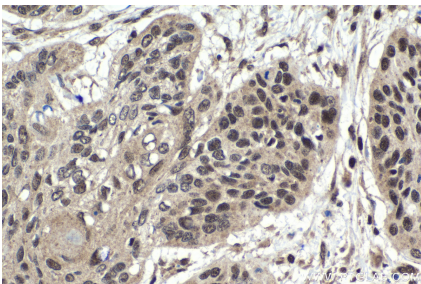
IP result of anti-SATB1 (IP:15400-1-AP, 4ug; Detection:15400-1-AP 1:500) with HEK-293 cells lysate 2000ug.



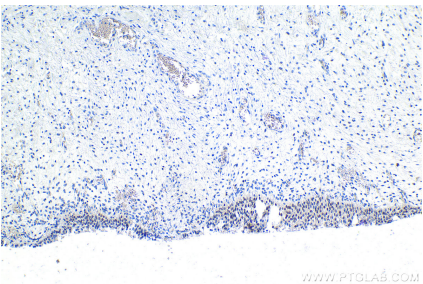
HEK-293 cells were subjected to SDS PAGE followed by western blot with 15400-1-AP (SATB1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



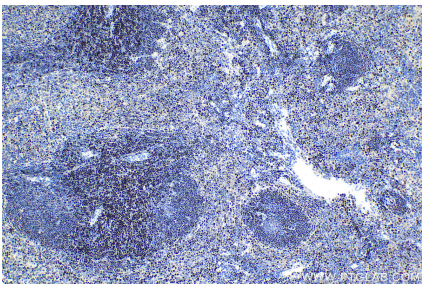
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



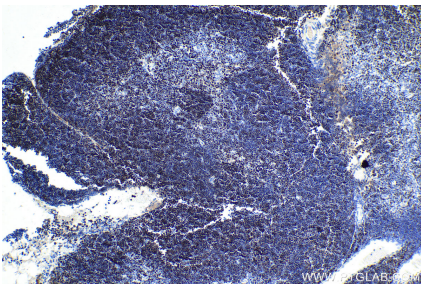
Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



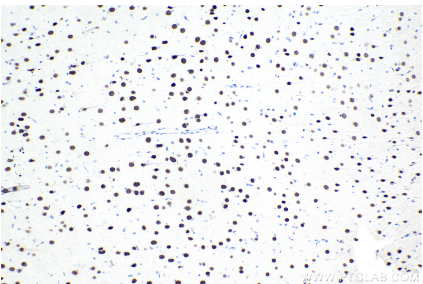
Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



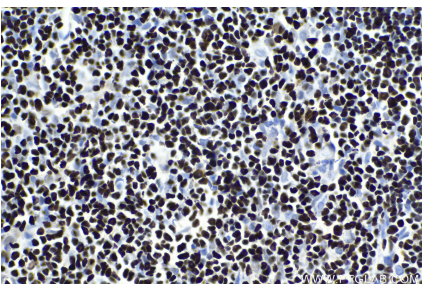
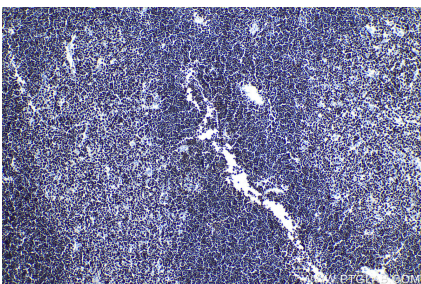
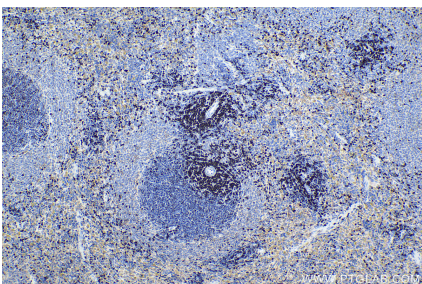
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse thymus tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded rat thymus tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded rat thymus tissue slide using 15400-1-AP (SATB1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).